

AMENDED PAGES
OF
NEW CLAIMS

SMP 18. A component for producing polymer mixtures, ~~form~~

thermoplasticized starch and a hydrophobic polymer, comprising

organosilicates with a homogeneous structure ~~consisting~~

~~of saponified polyvinyl acetate and alkali silicate solution;~~

reaction products prepared in situ; and

residues of a catalyst employed during the producing.

19. A process for producing a component ~~consisting of~~

~~polyvinyl acetate and alkali silicate,~~ comprising

intensive thorough mixing and shearing, for producing

polymer mixtures from thermoplasticized starch and hydrophobic

polymer polyvinyl acetate;

hydrolyzing and saponifying the polyvinyl acetate in the presence of a catalyst, with continuously adding of basically reacting compounds and of the alkali silicate.

20. The process according to claim 19, comprising

~~presaponifying the polyvinyl acetate with basically~~

reacting compounds up to a degree of hydrolysis of 10% to 40%; and

~~subsequently finally saponifying to a degree of~~

hydrolysis of between 50% and 100%.

21. The process according to claim 19, comprising

~~building up a slightly alkaline organosilicate with a pH~~

of about 7 to 8.5 from a starting polyvinyl acetate and water

glass, with a pH of 9 to 10.

22. The process according to claim 19, comprising adding a hydroxide together with the alkaline water glass or adding a hydroxide before the alkaline water glass is added.
23. The process according to claim 22, comprising adding calcium hydroxide to the polyvinyl acetate until a degree of saponification of between 10% and 40%, has been reached.
24. The process according to claim 19, wherein the catalyst is a low-molecular hydroxy compound selected from the group consisting of a low-molecular alcohol, methanol, ethanol, a polyhydroxyl compound, ethylene glycol, diethylene glycol, triethylene glycol, glycerol, and mixtures thereof.
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B2 25. The process according to claim 19, wherein the total amount of the catalyst compounds added does not exceed an amount of 0.5% to 20%, by weight based on the weight of the polyvinyl acetate.
26. The process according to claim 25, comprising providing a batch process; in the batch process, loading the polyvinyl acetate first

~~In the form of an aqueous suspension, and heating to the reaction temperature of 100°C to 160°C;~~

~~metering the basically reacting compound in continuously for presaponification; and metering the alkaline water glass solution in at reaction temperature after the desired degree of saponification has been reached,~~

27. The process according to claim 19,

wherein the mixing ratio of polyvinyl acetate to alkali silicate expressed in weight proportions of the solid material is in the range of 50:50 to 80:80.

28. The process according to claim 19, comprising using sodium disilicate and a hydroxide at least partially instead of the alkali silicate solution.

29. The process according to claim 19, comprising adding one or a plurality of polyfunctional silanes to the reaction batch or to the component.

30. The process according to claim 29, wherein the silane weight proportion amounts to 3% to 15% of the amount of silane introduced with the alkali silicate solution.

31. The process according to claim 19, comprising

adding native starch to the reaction batch or to the component.

32. The process according to claim 31, comprising adding 5% to 15% by weight of native starch based on the weight of the polyvinyl acetate.

33. The process according to claim 31, comprising adding vinyl acetate together with the starch.

34. The process according to claim 33, comprising adding 0.5% to 1.5% by weight of vinyl acetate based on the weight of the polyvinyl acetate.